

### AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated below.

[0119] In FIG. 4, the cross-section of the valve 15 used in the present embodiments is shown. FIG. 4(a) shows a closed state of the valve 15 while FIG. 4(b) shows an open state of the valve 15. The valve 15 comprises a body 224 **[[24]]** made of aluminum or aluminum alloy. A valve body 230 **[[30]]** is fixed to a shaft 32 by a bolt 32. On the valve body 230 **[[30]]**, an O-ring 34, which attains airtightness by sealing the inside 35 of the body 224 **[[24]]**, is mounted. At an upstream opening 22 of the valve 15, portions of the piping 14 (FIG. 3) to be connected to the remote plasma discharge chamber can be mounted. At a downstream opening 23, portions the piping 14 to be connected to the gas exit port 7 can be mounted. The mounting direction at the openings 23 and 22 is not limited and can be changed according to circumstances. Material used for the body 224 **[[24]]** of the valve 15 is not limited to aluminum or aluminum alloy. Other materials that have excellent resistance to corrosion, such as stainless steel, can also be used. The valve body 230 **[[30]]** is made of aluminum or aluminum alloy, but metals excellent in corrosion resistance such as nickel, titanium, stainless steel or resins excellent in corrosion resistance such as polyimide resin can be used. Additionally, the bolt 33 and the shaft 32 are made of metals that have excellent resistance to corrosion, such as aluminum, aluminum alloy, nickel and stainless steel. The O-ring 34 comprises an elastic material that is resistant to deterioration by the flowing gas to be used. The O-ring 34 preferably comprises fluorine-containing rubber, and more preferably a perfluoroelastomer.

[0120] Regarding the valve 15 used in this embodiment, in its closed state, the valve body 230 **[[30]]** is at the position shown in FIG. 4(a). The O-ring 34 mounted on the valve body 230 **[[30]]** seals the inside 35 of the body 224 **[[24]]**. As shown in FIG. 4(b), when the valve 15 is open, the valve body 230 **[[30]]** is pulled up into the space 36 within the body **[[24]]** 224 of the valve 15 and is stored. The vertical motion of the valve body 230 **[[30]]** is performed by moving the shaft 32 by a driving mechanism (not shown) of the valve 15. Importantly, as shown in FIG. 4(b), when the valve 15 is open, the valve body 230 **[[30]]** and the shaft 32 are stored entirely within the space 36 and are completely removed from the passage defined between the opening 23 and the opening 22. Thus, when the valve body 230 **[[30]]** is in the position of FIG. **[[4(a)]]** 4(b), there is no structure hindering cleaning gas flowing through the valve 15.